CELLULOSE DERIVATIVES HAVING GEL-LIKE RHEOLOGICAL PROPERTIES AND PROCESS FOR THE PREPARATION THEREOF

Abstract

A description is given of cellulose derivatives having gel-like rheological properties in aqueous solution characterized in that:

a) cellulose is alkalized with aqueous alkali metal hydroxide solution in the presence of a suspension medium,

b) the alkalized cellulose is reacted with one or more alkylene oxides,

c) then reacted with an alkyl halide present in the suspension medium

d) subsequently or simultaneously the alkalized cellulose is reacted with a crosslinking agent in an amount of 0.0001 to 0.05 eq, where the unit "eq" represents the molar ratio of crosslinking agent relative to the anhydroglucose unit (AGU) of the cellulose used, and

e) after, if appropriate, further addition of alkali metal hydroxide and/or alkylating agent, the resultant irreversibly crosslinked cellulose derivative is separated off from the reaction mixture, if appropriate purified and dried.